Gulf of Mexico Harmful Algal Bloom Bulletin

3 October 2005

National Ocean Service

National Environmental Satellite, Data, and Information Service

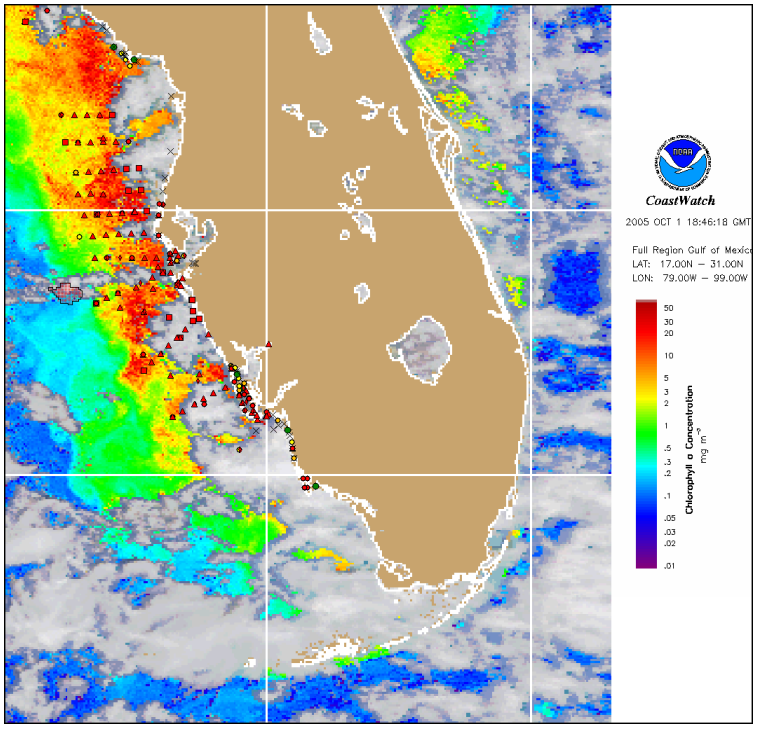
Last bulletin: September 29, 2005

Conditions: Harmful algal blooms have been identified from Pinellas to Collier County, Bay to Franklin, and Dixie to Levy Counties. The following patchy impacts are possible through Thursday: none to low at Pinellas, Manatee, Sarasota, Charlotte, Lee and northern Collier Counties. The following patchy impacts are possible through Thursday: none to very low at Bay, eastern Franklin, Dixie and Levy Counties, and low to moderate at Gulf and western Franklin Counties. Dead fish have been reported in Okaloosa, Walton, Bay, Gulf, Franklin, Sarasota and Collier Counties. Dead fish smell, while unpleasant, does not produce the same respiratory irritation as red tide.

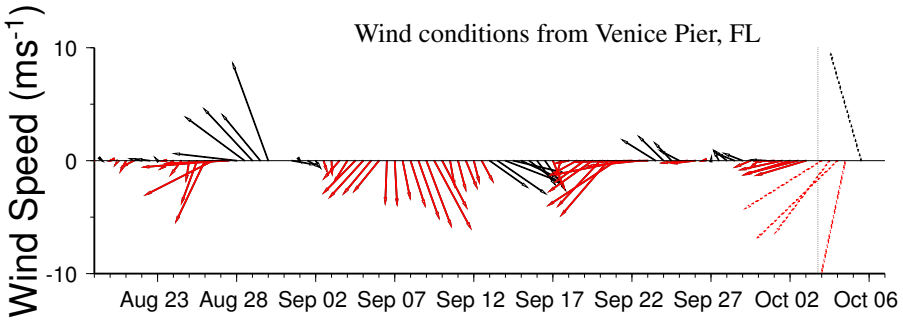
Analysis: Imagery indicates persistence of elevated chlorophyll band nearshore, although slight offshore transport was indicated from Taylor to Charlotte Counties. Sampling confirms band of *K. brevis* up to 35 miles offshore from Pinellas to Lee Counties (September 26-29; FWRI). The elevated chlorophyll band has decreased in overall intensity and east-west extent since the Sept. 29 bulletin. A hot spot is located ˜40 miles offshore of Sarasota and Charlotte Counties. An additional hot spot is located near elevated *K. brevis* concentrations offshore of Citrus, Hernando, and Pasco (20-50 μg/l; 28° 20'N, 83°12'W).

Wind transport model indicated general northward movement (23-38 km) since Sept. 29 bulletin. Strong northeasterlies through Tuesday may continue offshore transport and minimize impacts alongshore. However, upwelling favorable winds will likely maintain intensity. On Wednesday and Thursday, alongshore winds may increase reports of dead fish and respiratory impacts.

˜Fenstermacher and Fisher



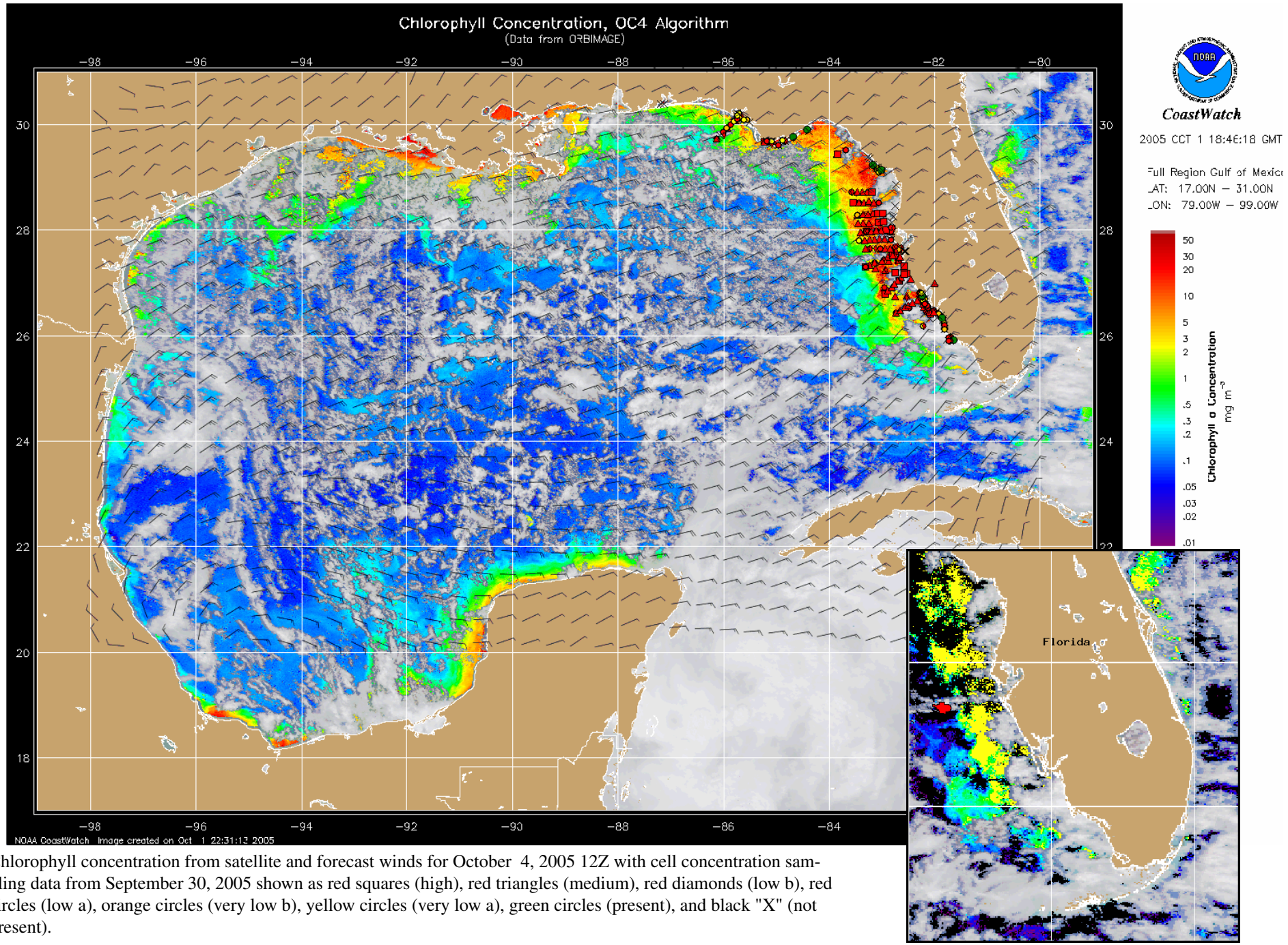
Chlorophyll concentration from satellite with HAB areas shown by red polygon(s). Cell concentration sampling data from September 30, 2005 shown as red squares (high), red triangles (medium), red diamonds (low b), red circles (low a), orange circles (very low b), yellow circles (very low a), green circles (present), and black "X" (not present).



Wind speed and direction are averaged over 12 hours from measurements made on buoys. Length of line indicates speed; angle indicates direction. Red indicates that the wind direction favors upwelling near the coast. Values to the left of the dotted vertical line are measured values; values to the right are forecasts.

SW Florida: Strong northeasterlies through Tuesday afternoon (15-20 knots; 8-10 m/s). Southeasterlies on Wednesday and Thursday (5-15 knots; 3-8 m/s).

NW Florida: Strong easterlies today followed by northeasterlies Tuesday night and Wednesday (15-20 knots; 8-10 m/s). Easterlies on Wednesday evening and Thursday (5-15 knots; 3-8 m/s).



Chlorophyll concentration from satellite and forecast winds for October 4, 2005 12Z with cell concentration sampling data from September 30, 2005 shown as red squares (high), red triangles (medium), red diamonds (low b), red circles (low a), orange circles (very low b), yellow circles (very low a), green circles (present), and black "X" (not present).

Blooms shown in red (see p. 1 analysis)